

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claim 1 (currently amended): A communication system comprising:

a gateway which transfers IP datagrams, said gateway detecting a protocol used for transfer of at least one IP datagram which is received;

a quality determining unit which includes QoS (quality of service) data of a plurality of protocols, wherein the quality determining unit determines a QoS which corresponds to the detected protocol based on said QoS data~~determines a QoS (quality of service); and~~

~~a gateway which transfers an IP datagram at said QoS; and~~

a user fee determining unit which determines a user fee for said IP datagram based on said QoS which is determined,

wherein said gateway transfers the at least one IP datagram at the OoS which is determined.

Claim 2 (currently amended): The communication system according to claim 1, wherein said gateway transfers a group of IP datagrams including said at least one IP datagram, and said

QoS includes a priority for said at least one IP datagram in the transfer of said group of IP datagrams.

Claim 3 (currently amended): The communication system according to claim 1, wherein said QoS includes a maximum allowable difference from a predetermined delay time for transferring said at least one IP datagram.

Claim 4 (currently amended): The communication system according to claim 1, wherein said gateway includes a buffer transiently storing which stores said at least one IP datagram, and said QoS includes specifies a size of said buffer.

Claim 5 (currently amended): The communication system according to claim 1, wherein said QoS includes provision of specifies whether a firewall service is provided.

Claim 6 (currently amended): The communication system according to claim 1, wherein said QoS includes provision of specifies whether a VPN (Virtual Personal Network) service is provided.

Claim 7 (currently amended): The communication system according to claim 1, wherein
said gateway ~~is provided with~~includes an API (Application Interface) for accessing said quality
determining unit in order to set said QoS.

Claim 8 (currently amended): The communication system according to claim 1, wherein
said gateway detects a protocol used for the transfer of said at least one IP datagram, ~~and said~~
~~quality determining unit determines said QoS based on said protocol based on content of a~~
header of the at least one IP datagram.

Claim 9 (currently amended): The communication system according to ~~claim 8~~claim 1,
wherein ~~quality determining unit includes~~QoS data is a ~~first~~ table indicative of a
correspondence between said detected protocol and said QoS, and said quality determining unit
determines said QoS referring to ~~based on~~ said first table.

Claim 10 (currently amended): The communication system according to ~~claim 8~~claim 1,
wherein said quality determining unit determines said QoS based on a ToS (Type of Service) of
said IP datagram in addition to the detected protocol.

Claim 11 (currently amended): The communication system according to claim 10, wherein said quality determining unit includesQoS data is a second-table indicative of a correspondence among said detected protocol, said ToS and said QoS, and said quality determining unit determines said QoS referring tobased on said second-table.

Claim 12 (currently amended): The communication system according to claim 8claim 1, wherein said at least one IP datagram includes an IP address of a user communicating said at least one IP datagram which is received bysaid gateway, and said quality determining unit determines said QoS based on said IP address in addition to the detected protocol.

Claim 13 (currently amended): The communication system according to claim 12, wherein said quality determining unit includesQOS data is a third-table indicative of a correspondence among said protocol, said IP address and said QoS, and said quality determining unit determines said QoS referring tobased on said third-table.

Claim 14 (currently amended): A communication system comprising:
a gateway which transfers an IP datagramIP datagrams, wherein said gateway detects a protocol used for the transfer of saidat least one IP datagram which is received; and

a quality determining unit ~~which determines a QoS (quality of service) based on said protocol, wherein said gateway transfers said IP datagram at said QoS which includes QoS (quality of service) data of a plurality of protocols, wherein the quality determining unit determines a QoS which corresponds to the detected protocol based on said QoS data.~~

Claim 15 (currently amended): The communication system according to claim 14, wherein said gateway transfers a group of IP datagrams including said at least one IP datagram, and said QoS ~~includes-specifies~~ a priority for said at least one IP datagram in the transfer of said group of IP datagrams.

Claim 16 (currently amended): The communication system according to claim 14, wherein said QoS ~~includes-specifies~~ a maximum allowable difference from a predetermined delay time for transferring said at least one IP datagram.

Claim 17 (currently amended): The communication system according to claim 14, wherein said gateway includes a buffer ~~transiently storing which stores~~ said at least one IP datagram, and said QoS ~~includes-specifies~~ a size of said buffer.

Claim 18 (currently amended): The communication system according to claim 14, wherein said gateway ~~is provided with~~includes an API (Application Interface) for accessing said quality determining unit to set said QoS.

Claim 19 (currently amended): The communication system according to claim 14, wherein said quality determining unit determines said QoS based on a ToS (Type of Service) of said at least one IP datagram in addition to the detected protocol.

Claim 20 (currently amended): The communication system according to claim 14, wherein said IP datagram includes an IP address of a user communicating said at least one IP datagram which is received by said gateway, and said quality determining unit determines said QoS based on said IP address in addition to the detected protocol.

Claim 21 (currently amended): The communication system according to claim 20, wherein said QoS ~~includes provision of~~specifies whether a firewall service is provided.

Claim 22 (currently amended): The communication system according to claim 20, wherein said QoS ~~includes provision of~~specifies whether a VPN (Virtual Personal Network) service is provided.

Claim 23 (currently amended): A communication system comprising:

a gateway which transfers ~~an IP datagram~~IP datagrams, wherein said gateway detects a protocol used for the transfer of said at least one IP datagram which is received;

a quality determining unit which includes QoS (quality of service) data of a plurality of protocols, wherein the quality determining unit determines a QoS which corresponds to the detected protocol based on said QoS data; and

a user fee determining unit which determines a user fee for said at least one IP datagram based on said QoS which is determined.

Claim 24 (currently amended): The communication system according to claim 23,

wherein said user fee determining unit determines said user fee based on a ToS of said at least one IP datagram in addition to the detected protocol.

Claim 25 (currently amended): A communication method comprising:

determining a QoS (quality of service) for at least one IP datagram from QoS data of a plurality of protocols, wherein the QoS which is determined corresponds to a detected protocol of the at least one IP datagram;

transferring an IP datagram ~~the~~ at least one IP datagram at said QoS by a communication system; and

determining a user fee for use of said communication system based on said QoS which is determined.

Claim 26 (currently amended): A communication method comprising:

receiving an IP datagram ~~at~~ at least one IP datagram;

detecting a protocol used for transmitting said at least one IP datagram which is received;

determining a QoS (quality of service) from QoS data of a plurality of protocols, wherein the QoS which is determined corresponds to the detected protocol; and

transferring said IP datagram at said QoS which is determined.

Claim 27 (currently amended): A communication method comprising:

transferring an IP datagram ~~at~~ at least one IP datagram by a communication system;

detecting a protocol used for transmitting said at least one IP datagram;

determining a QoS (quality of service) from QoS data of a plurality of protocols, wherein
the QoS which is determined corresponds to the detected protocol; and
determining a user fee for use of said communication system based on said detected
protocol.